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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/017,242	12/14/2001	Douglas B. Quine	F-419	1538

919 7590 09/08/2005

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EXAMINER

NASH, LASHANYA RENEE

ART UNIT PAPER NUMBER

2153

DATE MAILED: 09/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/017,242

Applicant(s)

QUINE ET AL.

Examiner

LaShanya R Nash

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1, 3-9, 12-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 23 and 24 is/are allowed.
- 6) ☒ Claim(s) 1-9, 12-22, and 25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

This action is in response to an Amendment filed June 22, 2005. Claims 1,3-9, and 12-25 are presented for further consideration.

### ***Response to Arguments***

Applicant's arguments, see Remark, with respect to the rejections of claims 1,7,9, and 12-13 have been considered but are moot in view of the new grounds of rejection in view of newly applied reference, Holleran et al. (US Patent 5,752,059).

Applicant's arguments, see Remark, with respect to the rejections of claims 12 and 19 have been considered but are moot in view of the new grounds of rejection in view of newly applied references, Holleran et al. (US Patent 5,752,059) and Mann et al. (US Patent 6,298,341).

Applicant's arguments filed June 22, 2005 have been fully considered but they are not persuasive.

In considering the Applicant's arguments the following factual remarks are noted.

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(I) Applicant contends that the cited references (i.e. Tsukui and Tsuei) are not properly combined.

(II) Applicant contends that the cited references (i.e. Tsukui and Hou) are not properly combined.

In considering (I), Applicant contends that the cited references (i.e. Tsukui and Tsuei) are not properly combined, specifically that the cited references do not contemplate determining the format of the user name portion of an address in a particular domain, not for a change in domain. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, there is motivation for combination of Tsukui and Tsuei as both references are commonly related to managing email addresses based on the associated domain names. Tsukui explicitly discloses storing the character strings comprising various email address (i.e. username, sub-domain) based on the top domain name (Figure 8), and further for subsequently changing the associated domain name (abstract). Specifically, Tsuei discloses a method for managing an email address for a user, wherein the user changes domain name (i.e. ISP; joe\_smith,@braincoil.com

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changes to joe.smith @headsporal.com; columns 1-2). As a result, the references share a commonality in altering and maintaining email addresses of users based on the domain names of those email addresses. Therefore, Examiner maintains that there is a suggestion to combine the aforementioned references as set forth below in the office action (i.e. "facilitate delivery of e-mail when a person obtains a new address and his or old e-mail address becomes invalid").

In considering (II), Applicant contends that the cited references (i.e. Tsukui and Hou) are not properly combined. In response to applicant's argument that Hou is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Hou discloses a method for string matching so as to determine the longest matching string of characters stored in a memory (abstract). Examiner asserts that Hou's field of endeavor is pertinent to the particular problem, in which the applicant was concerned, (i.e. comparing characters of an identified portion to the characters of known names). Examiner further asserts that the Hou reference was cited so as to present evidence that the string matching limitations of the method as recited by Applicant are functionally equivalent to the conventional longest string matching algorithm that was well know and widely used in the art at the time of

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the invention. Therefore, Examiner maintains rejections of claims under Tsukui in view of Hou (in addition to other cited references), as set forth below in the office action.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1,7,9, 12-13, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsukui et al. (US Patent 6,557,045) in view of Holleran et al. (US Patent 5,752,059), hereinafter referred to as Tsukui and Holleran respectively.**

In reference to claim 1, Tsuki explicitly discloses a method for determining the format of an email address based on an corresponding domain name, in order to prevent erroneous input occurrences of email addresses (abstract; column 2, lines 3-5; and Figures 2-4). Tsukui further discloses:

- A method (column 3, lines 49-50 and Figure 3) for determining an e-mail address formatting rule (i.e. predefined e-mail address segment, Figure 8) corresponding to a domain name (i.e. top domain name, Figure 8), (column 1, line 39 to column 2, line 28), the method comprising:

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- Gathering e-mail address data (i.e. character string/email address, Figure 4) corresponding to the domain name, (column 2, lines 16-28; column 3, lines 50-67; Figure 3-items 301-302);
- Determining the e-mail address formatting rule (column 7, lines 7-40) based on the gathered e-mail address data, (column 4, line 1 to column 5, line 39 and Figure 3-items 304-311); and
- Electronically storing (i.e. RAM, Figure 1-item 106) an association of the e-mail address formatting rule with the domain name, (column 5, lines 40-56, Figure 3-item 312).

However, the reference fails to explicitly show determining a formatting rule for the unique identifier portion of the email address. Nonetheless, it would have been obvious to accordingly modify the aforementioned method as disclosed by Tsukui for one of ordinary skill in the art, as further disclosed by Holleran.

In an analogous art, Holleran discloses a method for representing electronic mail addresses for users, (abstract). Holleran further discloses the method comprises determining a formatting rule (i.e. syntax template; Figure 7) for the unique identifier portion (i.e. Name string/everything in front of the "@" character; Figures 6a-6b&12a-12b) of the email address (columns 4-9). One of ordinary skill in the art would have been so motivated to accordingly modify the aforementioned method of Tsukui so as to allow users to enter e-mail addresses in the simplest and most appropriate way when the user does not know the proper syntax (i.e. rule), thereby increasing ease of use, (Holleran column 3, lines 1-22).

In reference to claim 7, Tsukui further discloses the method wherein the e-mail address data comprises a first e-mail address data (i.e. character string/email address, Figure 4), and the step of determining the e-mail address formatting rule further comprises: parsing a domain portion (i.e. top domain name, Figure 4) of the first e-mail address, (column 4, lines 1-42); parsing an identifier portion (i.e. sub-address, Figure 4) of the first e-mail address, (column 4, line 44 to column 5, lines 21); and determining whether a portion is consistent with one or more known e-mail address formatting rules, (column 5, lines 2-56). Holleran shows determining whether the identifier portion is consistent with one or more known e-mail address formatting rules, (Figure 13-items 1318-1322; columns 9-10).

In reference to claim 9, Tsukui discloses the method wherein the step of determining whether the identifier portion is consistent with one or more known e-mail address formatting rules further comprises: comparing the identifier portion to a list of known names (i.e. Figure 5, column 5, lines 5-21); identifying some or all the identifier portion as consistent with one or more known names (column 5, lines 5-21); determining whether the identifier portion is consistent with one or more known e-mail address formatting rules that are a function addressees' names (i.e. e-mail address of received e-mail, column 2, lines 16-23), (column 5, lines 22-56, column 7, lines 7-40).



In reference to claim 12, Tsukui discloses the method wherein the list of known names includes first names and last names (i.e. user names, Figure 5), and the step of comparing the identifier portion to a list of known names further comprises: comparing a first sub-portion (i.e. sub-domain, Figure 4) of the identifier portion to the list of known first names, (column 4, lines 42 to column 5, line 4); and comparing a second sub-portion (i.e. name, Figure 4) of the identifier portion to the list of known last names, (column 5, lines 5-59).

In reference to claim 13, Tsukui discloses the method wherein the first sub-portion is separated from the second sub-portion by a separator character, (i.e. ".", "@", column 4, lines 58-60 and column 5, lines 22-27).

In reference to claim 19, Holleran discloses the method wherein the one or more known e-mail address formatting rules (i.e. syntax template; Figure 7; columns 8-9) are from a list consisting of: last.first, first.last, alphanumeric only, LLLLLLFF, FLLLLLLL, FMLLLLLL, telephone number, punctuation required, minimum number of characters, or maximum number of characters, (Figures 6a-6b, 8-9, 11a-12b)

**Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tsukui et al. (US Patent 6,5557,045) in view of Mann et al. (US Patent 6,298,341), hereinafter referred to as Tsukui and Mann respectively.**

In reference to claim 25, Tsukui explicitly discloses a method for determining the format of an email address based on an corresponding domain name, in order to prevent erroneous input occurrences of email addresses (abstract; column 2, lines 3-5; and Figures 2-4). Tsukui further discloses:

- A method (column 3, lines 49-50 and Figure 3) for determining an e-mail address formatting rule (i.e. predefined e-mail address segment, Figure 8) corresponding to a domain name (i.e. top domain name, Figure 8), (column 1, line 39 to column 2, line 28), the method comprising:
- Gathering e-mail address data (i.e. character string/email address, Figure 4) corresponding to the domain name, (column 2, lines 16-28; column 3, lines 50-67; Figure 3-items 301-302);
- Determining the e-mail address formatting rule (column 7, lines 7-40) based on the gathered e-mail address data, (column 4, line 1 to column 5, line 39 and Figure 3-items 304-311); and
- Electronically storing (i.e. RAM, Figure 1-item 106) an association of the e-mail address formatting rule with the domain name, (column 5, lines 40-56, Figure 3-item 312).

However, the reference fails to show the step of gathering e-mail data further comprises the steps of: providing a domain registration interface to a party having authority for the domain name the domain registration interface including an interface for indicating one or more e-mail address formatting rules associated with the domain name and gathering the one or more e-mail address formatting

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rules associated with the domain name from the domain registration interface.

Nonetheless, it would have been obvious to accordingly modify the aforementioned method as disclosed by Tsukui for one of ordinary skill in the art, as further disclosed by Mann.

In an analogous art, Mann discloses a method for generating domain names and for facilitating registration and transfer of these aforementioned domain names (abstract). Mann further discloses the method comprises: providing a domain registration interface (Figure 5a) to a party having authority for the domain name the domain registration interface including an interface for indicating one or more e-mail address formatting rules associated with the domain name (i.e. root) and gathering the one or more e-mail address formatting rules associated with the domain name from the domain registration interface, (columns 4-7). One of ordinary skill in the art would have been so motivated to accordingly modify the aforementioned method of Tsukui so as to further automate domain name selection, thereby increasing efficiency (Mann column 2, lines 18-29).

**Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tsukui and Holleran as applied to claim 1 above, in view of Tsuei (US Patent 6,654,779), hereinafter referred to as Tsuei.**

In reference to claim 3, Tsukui explicitly discloses substantial features of the claimed invention specifically sorting registered (i.e. entered) email addresses by domain name, (column 1, lines 42-54 and column 2, lines 16-28).

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However, Tsukui is silent on the method comprising registering e-mail addresses pursuant to an e-mail forwarding service. Nonetheless, this would have been an obvious modification to the aforementioned method as disclosed by Tsukui and Holleran, for one of ordinary skill in the art at the time of the invention, as further evidenced by Tsuei.

In an analogous art, Tsuei discloses a method for e-mail address change management (abstract). Tsuei further discloses that this method comprises registering e-mail addresses pursuant to an e-mail forwarding service, (column 2, lines 28-49 and column 6, lines 16-43). This modifications to the method disclosed by Tsukui and Holleran would have been obvious to one of ordinary skill in the art at the time of the invention, because one would have been so motivated to "facilitate delivery of e-mail when a person obtains a new address and his or her old e-mail address becomes invalid", thereby increasing reliability for receiving intended e-mails, (Tsuei column 2, lines 60-63).

**Claims 4-6, 8, and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsukui and Holleran as applied to claim 1 above, in view of Tafoya et al. (US Patent 6,829,607), hereinafter referred to as Tafoya.**

In reference to claim 4, although Tsukui explicitly discloses substantial features of the claimed invention, the reference does not disclose the method wherein the step of gathering e-mail address data further comprises the steps of accessing public e-mail address listings, and storing e-mail addresses from the public e-mail address listings. Nonetheless, these would have been obvious

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modifications to the aforementioned method as disclosed by Tsukui and Holleran, for one of ordinary skill in the art at the time of the invention, as further evidenced by Tafoya.

In an analogous art, Tafoya discloses a method for automatically resolving e-mail address, so as to prevent undelivered e-mail messages due to incorrect user-input, (abstract and column 3, line 55 to column 4, line 50). Tafoya further discloses that the method comprises dynamically creating an e-mail address resolution list via accessing public e-mail address listings (i.e. database mail store listings located on public servers, column 7, lines 21-64), and storing e-mail addresses from the public e-mail address listings, (column 7, line 65 to column 8, line 18). These modifications to the method as disclosed by Tsukui and Holleran would have been obvious to one of ordinary skill in the art at the time of the invention, because one would have been so motivated to employ a method that "not only utilizes email user's entries, but also other known information that is not dependent on the entries to automatically resolve email address", and thereby increasing method accuracy through suggesting the most likely e-mail address correction, (Tafoya column 2, lines 1-5 and column 4, lines 41-46).

In reference to claim 5, although Tsukui explicitly discloses substantial features of the claimed invention, the reference does not disclose the method wherein the step of gathering e-mail address data further comprises the steps of gathering e-mail addresses from one or more e-mail address books.

Nonetheless, this would have been an obvious modification to the

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aforementioned method as disclosed by Tsukui and Holleran, for one of ordinary skill in the art at the time of the invention, as further evidenced by Tafoya.

In an analogous art, Tafoya discloses a method for automatically resolving e-mail address, so as to prevent undelivered e-mail messages due to incorrect user-input, (abstract and column 3, line 55 to column 4, line 50). Tafoya further discloses that the method comprises dynamically creating an e-mail address resolution list via gathering e-mail addresses from one or more e-mail address books, (column 7, lines 22-32). This modification to the method as disclosed by Tsukui and Holleran would have been obvious to one of ordinary skill in the art at the time of the invention, because one would have been so motivated to employ a method that "not only utilizes email user's entries, but also other known information that is not dependent on the entries to automatically resolve email address", and thereby increasing method accuracy through suggesting the most likely e-mail address correction, (Tafoya column 2, lines 1-5 and column 4, lines 41-46).

In reference to claim 6, Tsukui and Tafoya show the method wherein the step of gathering e-mail address from one or more e-mail address books further comprises performing address correction on the one or more e-mail address books (i.e. data store addresses) and informing an address-book owner of any corrections (i.e. resolution address entries) to be made on the one or more e-mail address books, (Tafoya Figure 5-item; column 13, lines 30-36).

In reference to claim 8, Tsukui explicitly discloses substantial features of the claimed invention specifically the method wherein determining the e-mail address formatting rule further comprises: for a plurality of e-mail addresses having the same domain portion (i.e. top domain name, Figure 4) as the first e-mail address, (column 4, line 1-42) performing the steps of parsing a plurality of identifier portions (i.e. sub-address, Figure 4) of the plurality of e-mail address, (column 4, lines 44 to column 5, line 21); determining whether the plurality of identifier portions are consistent with known e-mail address formatting rules, (column 5, lines 2-56); and recording the known e-mail address formatting rules that are determined to be consistent with the plurality of identifier portions, (column 5, lines 22-59). However, the reference does not disclose the method counting a frequency at which particular known e-mail formatting rules were found to be consistent with the plurality of identifier portions, and selecting from the recorded known e-mail address formatting rules, the e-mail address formatting rule for the domain name, based on the counted frequency. Nonetheless, these would have been obvious modifications to the aforementioned method as disclosed by Tsukui and Holleran, for one of ordinary skill in the art at the time of the invention, as further evidenced by Tafoya.

In an analogous art, Tafoya discloses a method for automatically resolving e-mail address, so as to prevent undelivered e-mail messages due to incorrect user-input, (abstract and column 3, line 55 to column 4, line 50). Tafoya further discloses that the method comprises determining the most likely e-address for resolution via counting a frequency of use associated with a particularly e-mail

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address, (column 7, line 65 to column 8, line 9 and column 8, lines 52-65) and subsequently selecting the most likely resolved e-mail address based on the counted frequency, (column 13, lines 11-17 and column 13, lines 45-64). These modifications to the method as disclosed by Tsukui and Holleran would have been obvious to one of ordinary skill in the art at the time of the invention, because one would have been so motivated to increasing method accuracy through suggesting the most likely e-mail address correction, (Tafoya column 13, lines 13-17).

In reference to claim 20, Tsukui explicitly discloses substantial features of the claimed invention specifically the method wherein the step of gathering e-mail address data corresponding to the domain name includes: gathering an e-mail address to whom a message is intended at the e-mail address, (i.e. e-mail address of received e-mail; column 2, lines 16-23) and the step of determining the e-mail address formatting rule based on the gathered e-mail address data further includes comparing the e-mail address to derive the e-mail address formatting rule, (column 5, lines 22-56). However, the reference does not disclose the method gathering addressee information about an addressee to whom a message is intended and comparing the addressee information to the e-mail address to derive the e-mail address formatting rule. Nonetheless, these would have been obvious modifications to the aforementioned method as disclosed by Tsukui and Holleran, for one of ordinary skill in the art at the time of the invention, as further evidenced by Tafoya.



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In an analogous art, Tafoya discloses a method for automatically resolving e-mail address, so as to prevent undelivered e-mail messages due to incorrect user-input, (abstract and column 3, line 55 to column 4, line 50). Tafoya further discloses that the method comprises method comprises dynamically creating an e-mail address resolution list via gathering addressee information (i.e. distribution list, contact information, friendly name) about an addressee to whom a message is intended, (column 7, lines 22-64) and comparing the addressee information to the e-mail address to derive the most likely e-mail address formatting rule (i.e. completion information). These modifications to the method as disclosed by Tsukui and Holleran would have been obvious to one of ordinary skill in the art at the time of the invention, because one would have been so motivated to increasing method accuracy through suggesting the most likely e-mail address correction, (Tafoya column 13, lines 13-17).

In reference to claim 21, Tsukui and Tafoya show the method wherein the addressee information is a name of the addressee (i.e. friendly name, Tafoya column 7, lines 47-54).

In reference to claim 22, Tsukui and Tafoya show the method wherein the step of gathering e-mail address data includes gathering the addressee information from an address book, (Tafoya column 7, lines 22-55).

**Claims 14 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsukui and Holleran as applied to claim 1 above, in view of Hou et al. (US Patent 5,329,405), hereinafter referred to as Hou.**

In reference to claim 14, Tsukui explicitly discloses substantial features of the claimed invention specifically the method wherein the identifier portion has a integer quantity of m characters (i.e. "character by character"; Figure 4; column 3, lines 59-63), and wherein the step of determining whether the identifier portion is consistent with one or more known e-mail address formatting rules further comprises: comparing the first characters of the identifier portion to a list of known names to determine whether the first characters of the identifier portion are consistent with the first characters in one or more names on the list of known names, (column 4, lines 42 to column 5, lines 27); identifying whether the one or more names which were found to be consistent with the first characters are first names or last names (i.e. name of user; Figure 5; and column 5, lines 5-39); and determining an identifier portion format (Figure 8) as having a beginning character group being in a first or last name, as identified (column 5, lines 33- 36 and column 7, lines 7-17). However the reference does not disclose the method wherein the identifier portion quantity of m characters is smaller than or equal to m; for a particular value of n, recording whether the first n characters of the identifier portion are consistent with the first n characters of the one or more names on the list of known names; changing the value of n, but not to be greater than m, and repeating steps (a) and (b); and identifying values of n for which the

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identifier portion is consistent with the one or more names on the list of known names, including a maximum number of first characters for which the identifier portion is consistent with the one or more names on the list of known names; and determining a character group being up to the maximum number of characters. Nonetheless, this common character string matching algorithm was well known in the art at the time of the invention, as further evidenced by Hou. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to accordingly modify the aforementioned method as disclosed by Tsukui and Holleran.

In an analogous art, Hou discloses a method for matching characters of one data string against characters of another string, so as to find the longest matching string (abstract and column 2, lines 30-43). Hou further discloses the longest matching string method to comprise: a data string with a quantity of  $m$  characters (i.e. input string; Figure 8-item 40; column 4, lines 24-26), and an integer  $n$  (i.e. iteration number/compare cycle) that is smaller than or equal to  $m$  (column 2, lines 2, lines 58-59); for a particular value of  $n$  (i.e. length counter/match length; Figure 8-item 320) recording whether the first  $n$  characters of the data string are consistent with the first  $n$  characters of the one or more names (i.e. stored data string; Figure 8-item 48), (column 4, lines 24-46); changing the value of  $n$ , but not to be greater than  $m$ , and repeating steps (a) and (b) (i.e. iteration; column 2, lines 35-41; and column 4, lines 47-51); and identifying values of  $n$  for which the data string is consistent with the one or more stored data string, including a maximum number of first characters (i.e. longest

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match) for which the data string is consistent with the one or more stored data string, (column 2, lines 54-58 and column 4, lines 52-63); and determining a character group being up to the maximum number of characters, ( i.e. longest matching string; column 4, line 64 to column 5, line 10). These modifications to the method as disclosed by Tsukui and Holleran would have been obvious, because one of ordinary skill in the art would have been so motivated to employ an established algorithm that “enables rapid and efficient variable length string matching”, (Hou column 3, lines 12-15).

In reference to claim 16, Tsukui and Hou show the method wherein the step of determining whether the identifier portion is consistent with one or more known e-mail address formatting rules further comprises: comparing a remainder group of characters (i.e. sub-domain name; Tsukui Figure 4), after the beginning character group, to the list of known names, (Tsukui column 4, lines 41-60); identifying whether the remainder group of characters is consistent with beginnings of one or more names from the list of known names (Tsukui column 4, line 61 to column 5, line 4); identifying characters of the remainder group which were found to be consistent with the beginnings of one or more names from the list of known names, and identifying whether the remainder group of characters is consistent with first or last names from the list of known names, (Tsukui column 5, lines 16-56) ;and determining the identifier portion format (Tsukui Figure 8) as having the remainder group having the characters comprising the beginning letters of first or last names, as identified , the

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remainder quantity of characters positioned after the beginning character group (i.e. user name), (Tsukui column 7, lines 7-25); and identifying a remainder maximum quantity of characters (i.e. longest match string, Hou column 2, lines 30-43).

**Claims 15 and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsukui and Holleran in view of Hou as applied to claim 14 above, and further in view of Tafoya et al. (US Patent 6,829,607), hereinafter referred to as Tafoya.**

In reference to claim 15, Tsukui, Holleran, and Hou disclose substantial features of the claimed invention specifically the method further comprising the steps of: performing steps (a) through (f) for a plurality of e-mail addresses having the same domain portion (Tsukui column 5, lines 39-55); and determining a format rule for the domain including first or last name (Tsukui column 5, lines 16-56) and the maximum numbers of characters (i.e. longest match string, Hou column 2, lines 30-43). However, the references do not disclose determining the formatting rule for the domain name, based on a counted frequency.

Nonetheless, this would have been an obvious modification to the aforementioned method as disclosed by Tsukui, Holleran, and Hou for one of ordinary skill in the art at the time of the invention, as further evidenced by Tafoya.

In an analogous art, Tafoya discloses a method for automatically resolving e-mail address, so as to prevent undelivered e-mail messages due to incorrect

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user-input, (abstract and column 3, line 55 to column 4, line 50). Tafoya further discloses that the method comprises determining the most likely e-address for resolution via counting a frequency of use associated with a particularly e-mail address, (column 7, line 65 to column 8, line 9 and column 8, lines 52-65) and subsequently selecting the most likely resolved e-mail address based on the counted frequency, (column 13, lines 11-17 and column 13, lines 45-64). This modification to the method as disclosed by Tsukui, Holleran, and Hou would have been obvious to one of ordinary skill in the art at the time of the invention, because one would have been so motivated to increasing method accuracy through suggesting the most likely e-mail address correction, (Tafoya column 13, lines 13-17).

In reference to claim 17, although Tsukui, Holleran, and Hou show substantial features of the claimed invention, the references do not disclose the method wherein the step of determining the identifier portion format further includes choosing the identifier portion format for the beginning character group and the remainder group such that they do not both correspond to a same name type, the same name type being last name or first name. Nonetheless, this would have been an obvious modification to the aforementioned method as disclosed by Tsukui, Holleran, and Hou, for one of ordinary skill in the art at the time of the invention, as further evidenced by Tafoya.

In an analogous art, Tafoya discloses a method for automatically resolving e-mail address, so as to prevent undelivered e-mail messages due to incorrect

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user-input, (abstract and column 3, line 55 to column 4, line 50). Tafoya further discloses that the method comprises choosing the e-mail format rule (i.e. resolution list) so that they do not correspond to a same name type (i.e. identical email addresses or contacts), (column 9, lines 27-39). This modification to the method as disclosed by Tsukui, Holleran, and Hou would have been obvious to one of ordinary skill in the art at the time of the invention, because one would have been so motivated to eliminate duplicate email address entries so as to increasing method accuracy through suggesting the most likely e-mail address correction, (Tafoya column 13, lines 13-17).

In reference to claim 18, Tsukui and Hou disclose substantial features of the claimed invention specifically the method further comprising the steps of: performing steps (a) through (k) for a plurality of e-mail addresses having the same domain portion (Tsukui column 5, lines 39-55); and determining a format rule for the domain including those of beginning character groups and remainder groups for the plurality of e-mail addresses, (Tsukui column 5, lines 16-56 and column 7, lines 7-25). However, the references do not disclose determining the formatting rule for the domain name, based on a counted frequency of identifier portion formats. Nonetheless, this would have been an obvious modification to the aforementioned method as disclosed by Tsukui, Holleran, and Hou for one of ordinary skill in the art at the time of the invention, as further evidenced by Tafoya.

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In an analogous art, Tafoya discloses a method for automatically resolving e-mail address, so as to prevent undelivered e-mail messages due to incorrect user-input, (abstract and column 3, line 55 to column 4, line 50). Tafoya further discloses that the method comprises determining the most likely e-address for resolution via counting a frequency of use associated with a particularly e-mail address, (column 7, line 65 to column 8, line 9 and column 8, lines 52-65) and subsequently selecting the most likely resolved e-mail address based on the counted frequency, (column 13, lines 11-17 and column 13, lines 45-64). This modification to the method as disclosed by Tsukui, Holleran, and Hou would have been obvious to one of ordinary skill in the art at the time of the invention, because one would have been so motivated to increasing method accuracy through suggesting the most likely e-mail address correction, (Tafoya column 13, lines 13-17).

### ***Allowable Subject Matter***

Claims 23 and 24 are identified as allowable subject matter. The following is a statement of reasons for the indication of allowable subject matter: The aforementioned claims describe a unique method for determining e-mail address formatting rules through the application of probability assigned to a gathered list of known names and a probability assigned to the previously determined e-mail address format rules. Applicable prior art discloses determining e-mail address formats through employing a probability (i.e. weight) based on frequency, but



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only as applied to entries of an e-mail address resolution list. As a result, the aforementioned claims indicate a non-obvious methodology over the prior art.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LaShanya R Nash whose telephone number is (571) 272-3957. The examiner can normally be reached on 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton Burgess can be reached on (571) 272-3949. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LaShanya Nash *LN*  
Art Unit, 2153  
September 2, 2005

*[Signature]*  
**KRISHNA LIM**  
**PRIMARY EXAMINER**